Next Generation Space Telescope

NGST

A NASA Origins Mission

NGST

NGST Update

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NGST Deputy Project Scientist

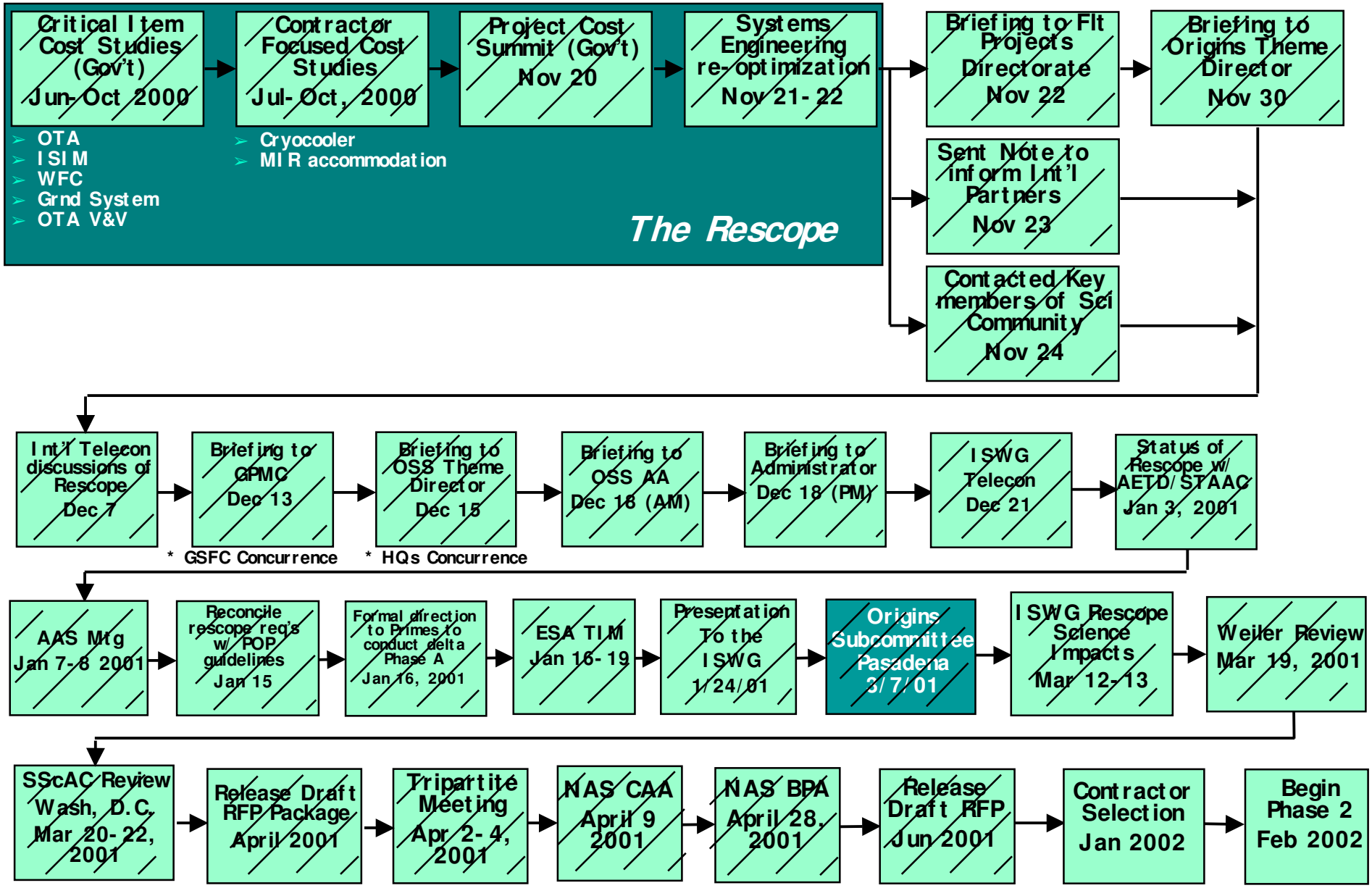
NGST '01

- Summary of events for first half of 2001
- Prime RFP
- Instrument AO
  - Digression on International participation in NGST
- Project reorganization
- Upcoming events
- Goals for next year

"Recent" Events

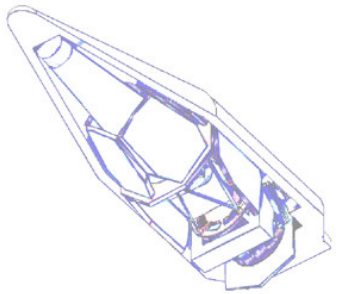
- Passed all HQ mandated wickets for science review of rescope (ISWG 03/12-13/01, NAS/NRC CAA 04/09/01, NAS/NRC BPA 04/28/01, OS 03/01)
- Tripartite negotiations, April 2-5, Frascati, produced a plan for International participation
- Two MISC telecons, produced draft science requirements
- ISWG interested in moving object tracking
- Town Hall meeting, June AAS, not controversial
- AO strategy agreed by HQ, including MIR at Weiler level
  - Assign Mid IR instrument to a NASA Center, with a Science Team and a Team Lead for it

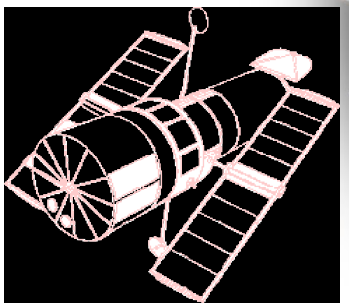
Rescope Process Flow

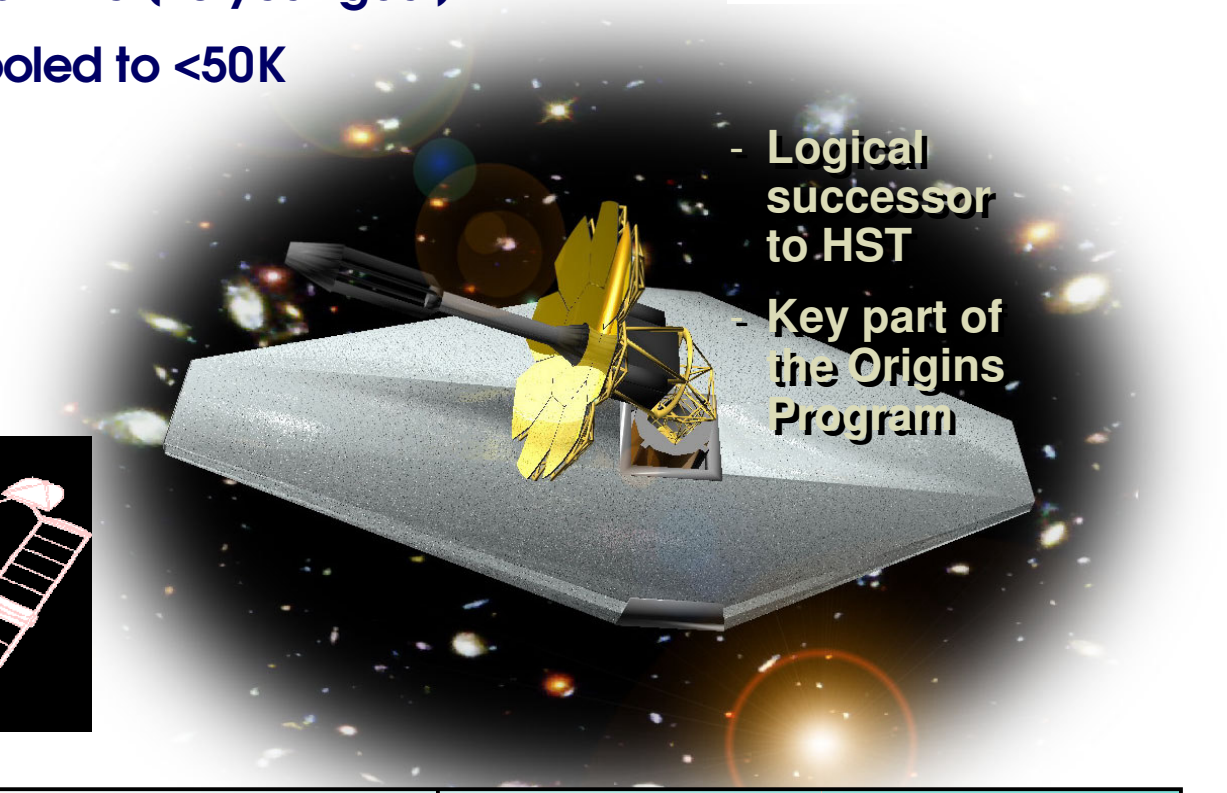


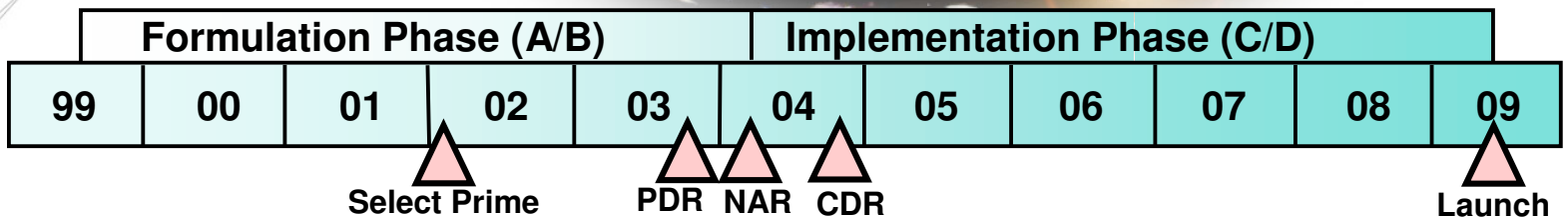
NGST at a Glance

- 6-meter class primary mirror
- 0.6-10+ μm wavelength range
- 5 year mission life (10 year goal)
- Passively cooled to <50K
- L2 orbit









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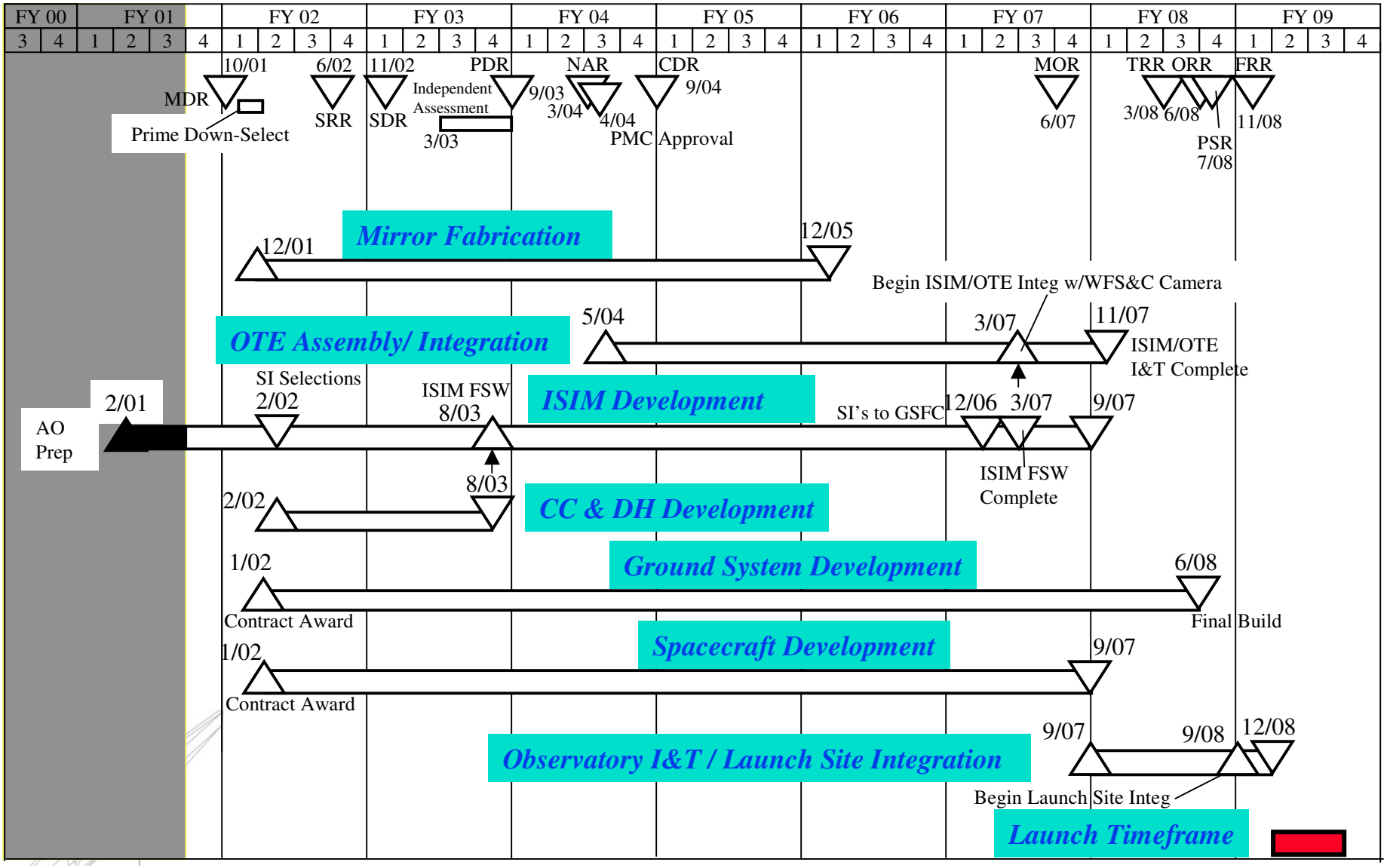
NGST Prime RFP

- Prime Contractors conducted excellent review of their Phase 1 efforts at STScI June 13-14.
- Draft RFP posted 06/22/01
- Comments received 07/08/01
- SEB and NGST Project Office working through comments and questions
- Final RFP issued by August 1
- NGST Project enters "blackout" period - no communication with prospective bidders during this period
  - Concentrate on preparations for Mission Definition Review (MDR)
    - Officially moves project from Phase A to Phase B
    - October 3-4 @ STScI
  - Work on Project risk database, lessons learned database

NGST TOP LEVEL OBSERVATORY SCHEDULE

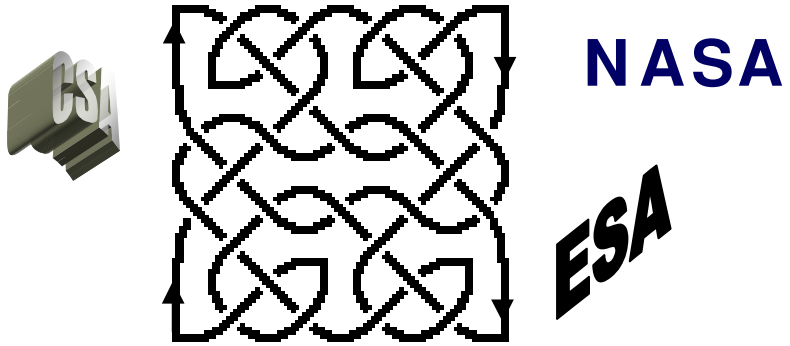


STATUS AS OF: 07/02/01

Instrument AO

- All US investigations sought through this AO
  - NIRCam PI, Facility Scientist, Telescope Scientist, IDS, MIRI Science Lead, MIRI Science Team
- Draft version in HQ signature cycle, anticipate OK to release soon
- Supporting library documents nearly complete, awaiting input from CSA

NGST and International Participation

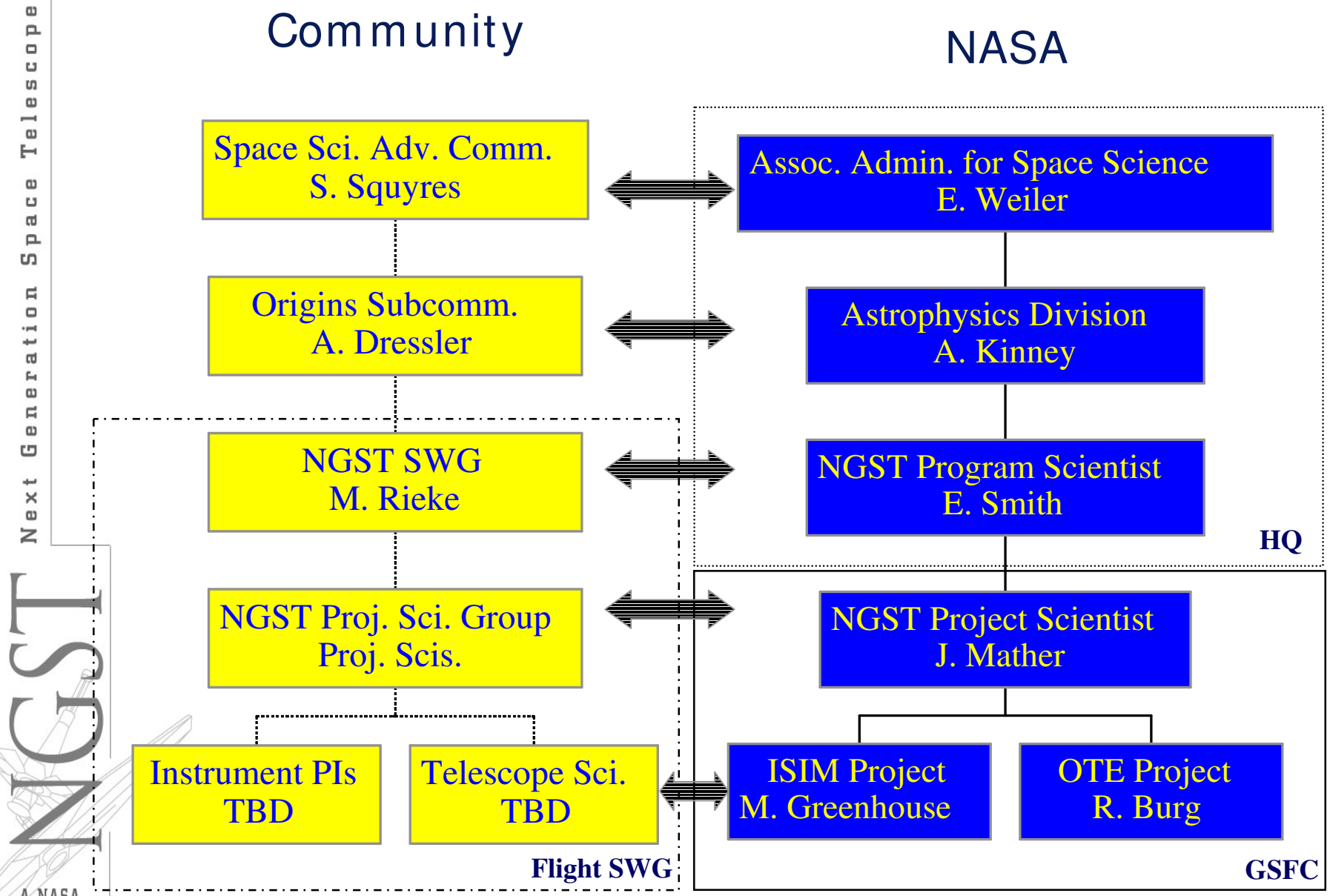


Apparent Process Flow for NGST Instrumentation

–Why do we have the plan we do?

1. Cost
2. International Support
3. Tradition
4. They owe us
5. Mid IR activities are worldwide

Science Oversight for NGST



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Upcoming Events

- Instrument AO draft release
- MISC meeting, Edinburgh, July 16-17
  - Confirm draft requirements produced on telecon
  - Complete draft instrument concept for review by ISWG and HQ
  - Confirm initial discussions about partnership plan

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Upcoming Events

- August 21-22 ISWG meeting at NASA HQ
  - Update on project progress and status
  - Consider NIRSPEC requirements, *R*=100 mode, wavelength range, and contrast specification
  - Consider MISC recommended requirements
  - Wrap up Moving Object Tracking issue
  - Send comments to NASA on draft AO
  - Final discussions of rescope and science impacts, validation of the DRM as representative of expected science program

Origins 02

- Meeting at Jackson Lake Lodge, Grand Tetons May 26-29, 2002
- Purpose: First generation Origins missions (NGST, SIM) have undergone substantial change, chance to reconnect with community, NGST SWG onboard
- Science Organizing Committee

  Chas Beichman
  Omer Blaes
  Bob Brown
  Adam Burrows
  Alan Dressler
  George Helou
  Jonathan Lunine
  John Mather
  Nino Panagia
  Mike Shull
  Steve Unwin
  Ann Wehrle
  Mike Werner

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Goals for Next Year (2002)

- Programmatic
  - Phase 2 Contract Award
  - ST ScI under separate NGST contract
  - International agreements in place and MOUs drafted
- Technology
  - Detector technology downselect
  - AMSD cryotesting underway
  - Wavefront algorithms demonstrated with PRC and both high/low authority cryo mirrors
- Science
  - Formation of flight SWG
  - Origins 02 Conference